

### **REMARKS**

In the specification, the paragraphs [0007] and [0024] have been amended to correct matters of form.

Claims 1-27 remain in this application. Claim 28 is currently canceled. No claims are presently or have previously been withdrawn. Claims 1, 2, 4, 6-19, 22, and 25-27 are currently amended.

#### **I. SPECIFICATION**

The examiner objected to the disclosure alleging that paragraph [0007] improperly references a claim. The applicant has amended paragraph [0007] and respectfully requests removal of the objection.

The examiner objected to the disclosure alleging that the amendment filed September 18, 2006 introduced new matter into the disclosure. Specifically, the examiner objected to the phrases “a transmission ratio lower than 25 and greater than 1 in paragraph [0024] and “the double helical gear has a transmission ratio of between 25 and 1 in claim 12.

The applicant has amended paragraph [0024] and claim 12 and respectfully requests removal of the objection. The applicant submits that no new matter has been added in making the amendments to paragraph [0024]. Although the applicant is making amendments, the applicant submits that the originally-filed specification adequately discloses the new language. Gear ratio terminology can be expressed in different forms. The applicant submits that this amendment clarifies the original German phraseology to an English phraseology. One of ordinary skill in the art would appreciate that the new language was properly described an enabled under 35 U.S.C. §112 and is thus intrinsically described in the original language. The new language is simply a rephrasing of the original language and the original meaning as understood by one of ordinary skill in the art is maintained. Alternatively, the applicant submits that the new language can be considered at the very least a correction of an obvious error in the originally-filed language and one skilled in the art would not only recognize the error, but also recognize the appropriate correction. The applicant therefore respectfully requests that the examiner withdraw the objection.

## **II. CLAIM REJECTIONS – 35 USC § 112**

### **A. Examiner's Statements**

The examiner rejected claim 12 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the examiner alleged that the recitation in claim 12 of a transmission ration of between 25 and 1 was not disclosed in the originally filed specification.

### **B. Claims**

The applicant has amended claim 12 above in accordance with the subject matter originally filed in specification paragraph [0024]. Although the applicant is changing the claim language, the applicant submits that the originally-filed specification adequately discloses the new language of claim 12. Gear ratio terminology can be expressed in different forms. One of ordinary skill in the art would appreciate that the new claim language was properly described an enabled under 35 U.S.C. §112 and is thus intrinsically described in the original language. The new language is simply a rephrasing of the original language and the original meaning as understood by one of ordinary skill in the art is maintained. Alternatively, the applicant submits that the new language can be considered at the very least a correction of an obvious error in the originally-filed language and one skilled in the art would not only recognize the error, but also recognize the appropriate correction. The applicant therefore respectfully submits that the amendments to claim 12 are supported by the originally filed application and requests that the examiner withdraw the rejection of claim 12.

## **III. CLAIM REJECTIONS - 35 U.S.C. § 103**

### **A. Claims 1-7, 11, 13-15, 17-23, and 25-28**

The examiner rejected claims 1-7, 11, 13-15, 17-23, and 25-28 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. (U.S. Patent No. 6,585,246) in view of Hormansdorfer, et al. (U.S. Patent No. 6,227,082).

The applicant respectfully submits that claims 1-7, 11, 13-15, 17-23, and 25-28 are not unpatentable because McCormick and Hormansdorfer do not suggest the desirability and thus the obviousness of the claimed invention. The applicant also respectfully submits that McCormick even teaches away from the claimed invention.

McCormick does not suggest the desirability of the claimed invention because McCormick does not teach or suggest a self-locking function to the gear system, instead teaching that it is desirable only to have a brake as an add-on feature. As stated in the specification, the McCormick clamp is designed to handle items as small as an electronic circuit board. Thus, the McCormick clamp is designed to typically handle small objects and normally does not include any locking function. Occasionally, McCormick states that the clamp may be used with larger objects such that the clamp requires larger clamp arms. McCormick teaches that for the larger arms, an add-on brake can optionally be attached to the motor shaft of the slave motor to stop slave motor and thus the motion of clamp. However, only when the clamp is to be used with large clamp arms does McCormick modify the stock clamp by adding on the optional brake. Thus, McCormick does not teach the desirability of the claimed invention because McCormick teaches that braking should be an add-on feature for use only in limited circumstances. Modifying McCormick as the examiner suggests thus amounts to impermissible hindsight afforded by the claimed invention.

McCormick goes even further by specifically teaching away from the examiner's suggested modification of McCormick. Under normal operation, the add-on optional brake is not only unnecessary, but not desired. McCormick teaches the desirability to start with a stock model for light use that may be modified on an as needed basis. This allows greater flexibility in implementation of the clamp for varying jobs. A clamp without a brake may be used to handle an electronic circuit board and that same clamp may then later be used to handle larger objects by adding-on the brake. Additionally, even with the brake installed on a clamp, the McCormick teaches a computer that only selectively operates the brake, thus allowing the clamp to be used on lighter objects even with brake added on without actuating the brake during use. Having the brake as an add-on item also keeps manufacturing costs down as it is cheaper to produce with the stock clamp with the optional brake as an add-on rather than having two different production models altogether. McCormick therefore teaches away from including braking as a built-in, full-time feature into the main gearing system itself as this would be over-engineering and add cost. Thus, the applicant respectfully submits that

there is no motivation to modify McCormick in light of Hormansdorfer as the examiner suggests.

Also, the applicant respectfully submits that there is no motivation to modify McCormick as the examiner suggests because doing so would render McCormick unsatisfactory for its intended purpose. As the examiner admits, Hormansdorfer teaches a double helical gear. However, the double helical gear is an unround helical gear specifically for directing the cutting motion of the work tool tip in the radial direction as the double helical gear rotates. Hormansdorfer teaches a work tool receptacle and a cross-frame for absorbing the radial movement of the work tool caused by the rotation of the double helical gear. McCormick, however, teaches that the gear wheels of the spur gear are fixed and may not move in the radial direction. The gear wheels are fixed because the gear wheels rotate a radially-fixed ball nut hub to direct movement of the ball screw in the longitudinal direction within a fixed longitudinal path. McCormick would not work for this purpose if unround gear wheels forced either the motor drive shaft or the ball nut hub to move in the radial direction during rotation of the gears. Thus, the applicant respectfully submits that because the proposed modification renders McCormick unsatisfactory for its intended purpose, there is no suggestion or motivation to make the proposed modification.<sup>1</sup> For at least these reasons, the

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<sup>1</sup> *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

<sup>2</sup> *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436 (Fed. Cir. 1986); *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858 (Fed. Cir. 1993).

applicant respectfully submits that claims 1-7, 11, 13-15, 17-23, and 25-28 are not obvious over the proposed combination of McCormick and Hormansdorfer and requests that the examiner withdraw the rejection.

Additionally, the applicant respectfully submits that McCormick and Hormansdorfer are not proper references for an obviousness rejection because not only are the references non-analogous to the art of blowout preventer actuation, but the references themselves are non-analogous to each other. To rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.<sup>2</sup> McCormick is directed to a power clamp for holding objects while Hormansdorfer is directed to a machine driven by a lathe for machining workpieces, particularly workpieces that are non-circular. Even further, a power clamp is not analogous to a workpiece machine. The claimed invention is directed to an actuator for the linear regulation of an actuating element for use in a blowout preventer. McCormick and Hormansdorfer are clearly in different fields of endeavor that involve different structures for different purposes. Also, McCormick and Hormansdorfer are not reasonably pertinent to the problem of blowout preventer actuation because a person of ordinary skill in the art would not reasonably have been motivated to look for or have expected to solve the problem by considering a reference dealing with an electric clamp. Thus it would not be obvious to combine McCormick et al and Hormansdorfer et al to teach the claimed invention because the references are non-analogous to the art of blowout preventer actuation. For at least this reason, the applicant respectfully submits that claims 1-7, 11, 13-15, 17-23, and 25-28 are not obvious over the proposed combination of McCormick and Hormansdorfer and requests that the examiner withdraw the rejection.

Additionally, even assuming that the combination of McCormick and Hormansdorfer is proper (without conceding such), the applicant respectfully submits that no *prima facie* case of obviousness has been established as the combination does not teach or suggest all of the claim limitations. As the examiner admits, McCormick does not teach or suggest a double-helical gear at all. Additionally, although Hormansdorfer teaches a double helical gear,

Hormansdorfer teaches that the gears are unround double helical gears. In fact, Hormansdorfer specifically teaches away from round helical gears as Hormansdorfer relies on the unround surface of the helical gear to define the cutting motion of the work tool tip. Thus, neither McCormick nor Hormansdorfer teach a double helical gear with round gearwheels as the claims recite. Thus, there is no *prima facie* case of obviousness because McCormick and Hormansdorfer fail to teach or suggest all of the limitations of the claims. For at least this reason, the applicant submits that claims 1-7, 11, 13-15, 17-23, and 25-28 are not obvious over the proposed combination of McCormick and Hormansdorfer and requests that the examiner withdraw the rejection.

**B. Claim 8**

The examiner rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. in view of Hormansdorfer, et al., and further in view of Waber (U.S. Patent No. 6,095,487).

Claim 8 depends indirectly from allowable claim 1. The applicant incorporates the remarks made above regarding allowable claim 1. For these reasons, the applicant respectfully submits that claim 8 is also allowable over the cited references.

**C. Claims 9-10 and 24**

The examiner rejected claims 9-10 and 24 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. in view of Hormansdorfer, et al. and further in view of Allen (U.S. Patent No. 5,722,304).

Claims 9-10 and 24 depend directly or indirectly from allowable claim 1. The applicant incorporates the remarks made above regarding allowable claim 1. For these reasons, the applicant respectfully submits that claims 9-10 and 24 are also allowable over the cited references.

**D. Claim 12**

The examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. in view of Hormansdorfer, et al., and further in view of Coppola, et al. (U.S. Patent No. 5,743,348).

Claim 12 depends directly from allowable claim 1. The applicant incorporates the remarks made above regarding allowable claim 1. For these reasons, the applicant respectfully submits that claim 12 is also allowable over the cited references.

#### **E. Claim 16**

The examiner rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over McCormick, et al. in view of Hormansdorfer, et al., and further in view of Gilges, et al. (U.S. Patent No. 5,370,011).

Claim 16 depends indirectly from allowable claim 1. The applicant incorporates the remarks made above regarding allowable claim 1. For these reasons, the applicant respectfully submits that claim 16 is also allowable over the cited references.

#### **IV. AMENDMENTS MADE NOT RELATED TO PATENTABILITY**

The applicant has amended claims 1, 2, 4, 6-19, 22, and 25-28 to more clearly, correctly, and properly claim the invention and not for purposes of patentability. Specifically, the applicant has amended these claims for grammatical clarity due to the translation of the German into English.

These statements are not an admission that the other amendments were made for purposes of patentability, meant to be limiting in any way, or meant to be all-inclusive of amendments not made for purposes of patentability.

#### **V. STATEMENT REGARDING CLAIMS**

The applicant comments on the allowability of the claims by addressing the examiner's comments in this paper as well as previously during the prosecution of this application. By doing so, the applicant is in no way limiting its ability to identify additional points of novelty regarding the independent claims or dependent claims at a later date.

#### **CONCLUSION**

The applicant respectfully requests reconsideration the pending claims and that a timely Notice of Allowance be issued in this case. If the examiner feels that a telephone conference would expedite the resolution of this case, the examiner is invited to contact the undersigned.

In the course of the foregoing discussions, the applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. There may also be other distinctions between the claims and the prior art that have yet to be raised, but that may be raised in the future.

Unless the applicant has specifically stated that an amendment was made to distinguish the prior art, it was the intent of the amendment to further clarify and better define the claimed invention and the amendment was not for the purpose of patentability. Further, although the applicant may have amended certain claims, the applicant has not abandoned its pursuit of obtaining the allowance of these claims as originally filed and reserves, without prejudice, the right to pursue these claims in a continuing application.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769 (ref. 1600-11400) of Conley Rose, P.C., Houston, Texas.

Respectfully submitted,  
CONLEY ROSE, P.C.

/Collin A. Rose/

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